

Fostering Innovation in Electronic Government: Benefits and Challenges of XML for Web Site Management

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As government Web sites have grown in size, complexity, and prominence, Web site management, content management, maintenance costs, and accessibility have become growing concerns for federal, state and local governments. Government agencies are losing the ability to be responsive and flexible in providing new information and services and the costs of maintaining these Web sites have become prohibitive. Government webmasters and system administrators have come to realize that the technologies and strategies used in the past to build most Web sites are designed to produce individual Web pages. They do not provide a structure to easily maintain entire Web sites, keep them responsive to changing needs, or manage the workflow involved in Web content production and maintenance; nor do they facilitate the sharing and reuse of Web site content. This paper examines the potential of XML for Web site content management in government settings. Five state government agency teams were selected, looking for a mixture of several aspects such as technological expertise, organizational capabilities, agency size, and institutional environment. The study uses multiple research methods such as semi-structured interviews, surveys, and analysis of relevant documents to explore the benefits and challenges of using XML for Web site content management in government agencies. Overall, participants identified information consistency, reduction of data and content duplication, and compatibility with new devices and formats as the main benefits. Organizational and individual resistance to change, multiple and different priorities, and unrealistic goals were identified as the most important barriers. The paper also reports some differences in perceptions between technical and program staff.